#### 3. SUCCESSFUL PRACTICES

#### 3.1 INTRODUCTION

To establish a context for the creation of a truck management program in the District, Volpe analyzed other cities and states for innovative or successful truck management policies and practices. As part of this effort, Volpe researched the following areas:

- Baltimore, Maryland
- Cambridge, Massachusetts
- Chicago, Illinois
- London, England
- Los Angeles, California
- New York City, New York
- Portland, Oregon
- San Francisco, California
- Seattle, Washington
- State of Maryland
- Vancouver, British Columbia

The cities and states researched form a varied group, demonstrating geographic, demographic, and economic diversity, as well as a diversity of approach to the management of freight operations. To conduct this research, Volpe interviewed representatives of municipal governments, state government, and regional planning agencies to capture different perspectives and to present a full picture of the myriad roles government can play in the planning and management of freight movement. Several of the cities were selected for their established reputations as innovative leaders in the field—these cities were confronted with major truck activities, often from a neighboring port or other major industrial facility—and others, including the State of Maryland, for their geographic proximity to Washington, DC. The lessons gleaned from this research are not specific to the environments from which they come; therefore, generalizations can be made and applied to the needs of the District.

Of the case studies included here, no single place offers an example of the best truck management program. Instead, each region has developed strengths in particular areas—congestion alleviation, curbside management, truck routing—and it is those strengths that are described in detail. The studies provide examples of the successful management of individual aspects of freight operations, and can be knit together to form a comprehensive plan. In addition to the 11 case studies, this report provides an analysis of the dominant themes that emerged from the research.

#### 3.2 THEMES

**Education and outreach** have been key to the success of truck management policies in several of the cities analyzed for this study. As new regulations are adopted, or new truck routes implemented, cities have worked to involve the trucking industry, local businesses, and elected leaders in the decision-making process, thereby lending the final decisions important credibility and acceptance. Once new policies are developed, education becomes

a crucial component of ensuring compliance. The owners and operators of trucks need to be fully informed of any new rules governing truck operations, and cities have worked to provide information through printed brochures, websites, and telephone hotlines, all the while offering members of the trucking industry mechanisms for commenting upon new policies and routes.

For all of the cities researched, **enforcement** is a crucial element of any truck management program, and often one of the most challenging. Regulations regarding the activities of trucks, particularly those that involve unusual or innovative policies, require careful enforcement by local law enforcement officials to ensure a reasonable level of compliance. In some cases, effective enforcement can be achieved simply through a comprehensive effort to educate freight companies and drivers on the existing policies and regulations pertaining to freight operations. A failure to fully enforce truck management policies, however, can undermine their effectiveness and lead to additional problems with truck operations. The need for effective enforcement applies to all aspects of truck operations, from parking to loading to the use of designated routes and appropriate permits, and cities must plan for and fund an appropriate level of law enforcement to monitor compliance.

Some of the most far-reaching truck management policies involve **innovation**, both in policies and procedures, and the use of new **technologies**. Innovative policies and procedures are ones that look beyond the standard mechanisms for managing truck traffic—including traditional freight-only planning, piecemeal road closures and weight restrictions—to advanced methods for increasing the capacity of the transportation system while decreasing the impact of truck traffic on residential neighborhoods. Innovative policies observed during this study including the variable use of parking areas, in which individual spots can serve as both loading zones and metered spaces at different times of the day; the development of complex networks of designated truck routes; and the creation of multi-stakeholder planning processes for intermodal freight management. New technologies are also playing an increasing role in truck management, most dramatically in the case of the London Congestion Charging program, in which all vehicles entering the central core of commercial London are monitored and regulated through a system of closed-circuit cameras and fees.

As the movement of freight is a regional issue, with importance for multiple jurisdictions, many cities included in this study are working in cooperation with other levels of government on the issues of truck management. **Interagency coordination** can involve the sharing of information and effort between municipal, county, and state government offices, as well as cooperative work with regional planning agencies. This sort of coordination, when successful, allows traditional administrative and geographic barriers to be overcome and permits long-range, regional planning for the movement of goods. It also allows municipal governments to benefit from the expertise of state and regional agencies, including expertise in Geographic Information Systems (GIS) and advanced traffic modeling.

Several cities researched for this study have found that making **investments in infrastructure**, particularly proactive investments, used by trucks is an important way to

encourage the use of designated truck routes and to keep trucks away from other, less desirable roadways. Building and retrofitting particular routes to specifications that are well suited for truck use can help to promote the safe and efficient operation of trucks. Furthermore, the improvement and regular maintenance of truck infrastructure—including roads, bridges, weigh stations, and truck pull-offs—indicates a level of cooperation and support for trucking operations that can build credibility and cooperation between municipalities and the trucking industry.

**Public-private partnerships** are a key ingredient in managing and promoting better truck operations. Most of the cities studied have found ways to reach out to and include representatives of the private sector, including representatives of the trucking industry and of local and regional business interests, in their decision-making processes for truck management. Cooperative planning with the private sector provides many advantages, including assistance with identifying truck routes that will be embraced by the trucking industry, with prioritizing truck-related improvement projects, and with implementing truck management policies. Additionally, cooperation and outreach with the private sector help to increase the chances that any new policy will be embraced and complied with.

As with interagency coordination, **regional cooperation** is a necessary component of planning for and managing freight operations that are, by their nature, regional. Several of the cities studied have found ways to work cooperatively with their neighboring communities in order to manage the flow of freight traffic through and across multiple jurisdictions. In particular, many cities seem to work through the regional planning agencies—particularly Metropolitan Planning Organizations (MPOs)—of which they are a part, to plan for the routing, enforcement, and infrastructure improvements that are necessary for effective freight management.

Most of the cities studied use a combination of **regulations and incentives** to promote their truck management policies, with some leaning toward regulation and others toward incentives. The regulation-oriented municipalities develop multi-faceted management programs, of which education and comprehensive enforcement are major components. The incentive-oriented municipalities prefer to work in voluntary cooperation with trucking companies and local businesses to encourage compliance with desired truck management policies, allowing them to avoid explicit regulations. Most cities develop truck management policies that combine both regulatory and incentive-based tools.

# 3.3 CASE STUDIES Baltimore, Maryland

Relevant Public Agencies:

Baltimore Development Corporation Baltimore Metropolitan Council Baltimore City Planning Department Baltimore City Office of Transportation Maryland Port Administration

Themes: Regional cooperation, public-private partnerships, education and outreach, interagency coordination

Located 44 miles northeast of the District, Baltimore is home to close to 700,000 residents and hosts a significant seaport in the southeast quadrant of the city. The operations of the Port of Baltimore, combined with the activities of the local commercial and retail sectors, generate truck traffic on the streets of Baltimore and its surrounding region. In particular, the local roads leading from the Port of Baltimore to the Interstate 95 corridor, which connects Baltimore with the Washington, DC, area, frequently experience heavy truck traffic.

In an effort to limit the amount of through-truck traffic using local roads, Baltimore city has created a network of designated truck routes to separate local truck traffic from regional truck traffic. In certain neighborhoods, Baltimore has created local truck zones to protect the roads from unnecessary use by through trucks. These zones restrict through-trucks (i.e., trucks without local destinations) from a designated area of multiple parallel streets. Both variable message signs and permanent signs alert drivers to the restricted areas and provide alternate route information for those trucks without deliveries in the zone. The alternate routes offered include a ring road around the city, two tunnels running under the Inner Harbor, and a bridge, all of which allow trucks to bypass the center of the city. Baltimore has had mixed success in enforcing the use of its alternate truck routes.

The Baltimore Development Corporation, a local economic development organization, has worked to increase the industrial infrastructure of the southeastern section of the city and to increase truck accessibility to the facilities there. The Baltimore City Planning Department also works with developers to ensure that all new construction in the city has adequate off-road truck facilities—for the efficient loading and unloading of goods outside of the flow of traffic—to meet present and future needs.

Outside of the boundaries of the city of Baltimore, the Baltimore Metropolitan Council—the MPO for the Baltimore area—has established the Freight Movement Task Force. The members of this task force represent both the public and private sectors—the MDOT, the Maryland State Police, members of the trucking industry, and academic researchers all serve on the task force—and work to develop implementable strategies to improve freight movement in the Baltimore area.

Recently, the task force has focused on the need for truck parking facilities/spaces. This review led to: (1) identifying truck stops and rest areas; (2) improving truck-oriented signage; and (3) better education and enforcement. The task force recently hosted a design charrette in which different stakeholders were invited to map out problem areas for trucks and to consider possible solutions together. Among other education initiatives, the task force has worked with MDOT to update a free map of truck routes, which can be ordered online.

### Cambridge, Massachusetts

Relevant Public Agencies:

Cambridge Licensing Department
Cambridge Police Department
Cambridge Traffic, Parking and Transportation
Department
Massachusetts Highway Department

Themes: Regional cooperation, public-private partnerships, education and outreach, innovation and technology, regulation and incentives

The city of Cambridge, a densely knit community of 100,000 residents, has long had problems with truck-generated noise and vibration. Located immediately northwest of downtown Boston, Cambridge offers several convenient routes for truck drivers looking to travel from the Massachusetts Turnpike to coastal industrial facilities, particularly petroleum facilities, located northeast of Cambridge. Cut-through truck traffic, which accounts for approximately 16 percent of all truck traffic on Cambridge roads, joins the significant number of trucks serving local businesses and residents, producing a public impression of heavy truck traffic in a predominantly residential city. To address this impression, Cambridge has adopted a patchwork of truck bans over the past few decades and requires that most new commercial development include off-street loading/unloading facilities for trucks.

In 1999, citizen activism on the issue of truck traffic spurred the Cambridge City Council to approve a zoning ordinance to ban all nighttime through truck traffic from city streets. In the face of severe opposition from representatives of the trucking industry, neighboring communities, and the Massachusetts Highway Department, Cambridge agreed not to enforce the ordinance in exchange for participation in a regional study of freight movement. The Massachusetts Highway Department paid for the ensuing study, which involved multiple stakeholders from both the public and private sectors. The two-vear study included the collection and analysis of in-depth traffic data and a series of public meetings.

A revised ordinance, approved by the Cambridge City Council in January

# Why Do Trucks Cause Noise and Vibration? What Can be Done to Alleviate Them?

The noise and vibration generated by trucks, particularly large trucks, typically has one of three origins: (1) contact between tires and pavement; (2) the engine and exhaust systems; and (3) ground-borne tremors caused by the weight of the truck.

Researchers traffic and engineers are with experimenting innovative pavement materials designed to dampen the whining noise caused by the sound of tire meeting road. As trucks in urban environments rarely travel at speeds high enough to cause this noise, other efforts are underway to control truck-generated noise on city streets. These include the stricter enforcement of noise ordinances—the use of a "noise-cam" to track offending vehicles offers promise—and the installation noiseof dampening window insulation in neighborhoods with significant truck activity.

2003, restricted cut-through truck traffic traveling between the hours of 11 PM and 6 AM to designated streets. To develop the approved nighttime routes, Cambridge city staff worked closely with the trucking industry and with neighboring communities to create a series of designated routes that would be acceptable to all. Cambridge coupled the development of the nighttime routes with an extensive education campaign, in which information was provided to truck drivers and trucking companies through pamphlets, websites, and telephone hotlines. Overseen by the Cambridge Parking and Transportation Department and enforced by the Cambridge Police Department, the ordinance was well received by the trucking industry and compliance was excellent. However, the Massachusetts Highway Department has recently required the city of Cambridge to suspend the ordinance, leaving the issue unresolved.

Cambridge has also worked with regional public agency stakeholders to encourage the prioritization of roadway improvement funding for those roadways designated for use as truck routes. Cambridge has found that acceptance of designated routes by truck drivers and trucking companies depends, in part, upon the condition of the roadways used for the approved routes. Drivers are much more likely to use roads that are in good condition.

To facilitate the loading and unloading of goods in some of the retail districts of the city, Cambridge has implemented a program of targeted loading zones. Targeted zones are ones which serve as loading zones during certain hours of the day—generally during the morning—in order to meet the needs of local retailers and restaurants. Targeted loading zones are generally used as metered public parking during the rest of the day. Cambridge has found targeted loading zones to be an effective way to increase the capacity of the roadway network for freight operations, without compromising the needs of other users or require the construction of additional infrastructure.

## Chicago, Illinois

Relevant Public Agencies: Chicago Area Transportation Study (CATS)

Chicago Police Department

Chicago Department of Planning &

Development Chicago DOT

Themes: Regional cooperation, public-private partnerships, investment in infrastructure, enforcement

A city of 2.9 million residents, Chicago is a vital national nexus for multimodal freight operations. Home to multiple intersecting rail and truck routes, as well as an important port, Chicago has been a key industrial and transportation center for the past century. However, the Chicago DOT currently has no holistic plan for managing truck traffic through the city; rather, it relies upon the program for permitting overweight trucks—issued by the Chicago DOT and enforced by the Chicago Police Department—as its primary mechanism for tracking truck movement through the city. Because of the heavily industrial nature of Chicago, many trucks use the network of arterial streets as their primary routes through the

city, thereby insulating residential neighborhoods from truck-generated noise and vibration. The arterial network is frequently congested, however, and large trucks are prohibited from some routes due to low-hanging bridges.

The Chicago DOT and Chicago Department of Planning & Development work together to manage a program for the identification and improvement of significant industrial corridors within the city, including the improvement of truck access to and along the corridors. Working with representatives of the trucking industry and other important industries, the DOT pinpoints and invests in needed truck-oriented improvements both within the corridors and along the arterials, providing expressway connections, then works to encourage the use of the improved routes by trucking companies. Each designated corridor has an appointed council, made up of representatives of the public and private sectors, and council meetings are held on a regular basis to plan improvements for each corridor.

The Chicago DOT staff work cooperatively with the owners and operators of industrial facilities in the city—warehouses, factories, and other facilities—to develop programs for loading and unloading that minimize truck idling and double-parking. Members of the city staff help facility operators to identify the optimum times to receive shipments to increase the efficiency and speed of each delivery. Compliance with the developed plans is done purely voluntarily—there are no existing regulations to enforce it.

Chicago also works to enforce parking regulations, especially in the downtown area, to discourage double-parking and the misuse of loading zones. In particular, Chicago has mandated that double-parking be considered a moving violation, rather than simply a parking violation, thereby increasing the penalty and making it possible to tow a vehicle for double-parking. Chicago also works to ensure that trucks operating in the downtown area have sufficient loading/unloading space, by requiring that one off-street parking bay be constructed for every 100,000 square feet of commercial space.

Outside of the boundaries of the city of Chicago, the CATS—the MPO for the Chicago region—manages the Intermodal Advisory Task Force. Established in 1994, the task force, made up of freight operators (both trucking and railroad), civic organizations, and public officials, works to raise public awareness of the importance of intermodal freight movement to the economic health of Chicago and to plan for improved freight facilities in the area. The Task Force encourages cooperative participation by both the public and private sectors and provides a forum for discussion of the long-term freight needs of the area, with an emphasis on intermodal coordination. The task force assists in prioritizing freight-oriented infrastructure projects and has worked with the staff of CATS to develop an inventory of major intermodal facilities and projects in the region. The Task Force also explores opportunities for the creative financing of freight projects, and has hosted public workshops on the future of freight operations in the Chicago region.

### London, England

Relevant Public Agencies:

Transport for London
The Office of the Mayor of London

Themes: Innovation and technology, regulation and incentives, investment in infrastructure

In February 2003, Transport for London—the DOT for the city of London—introduced the Central London Congestion Charge, an effort to reduce traffic congestion in the central district of London. Bounded by the inner ring road that surrounds central London, the congestion charge zone covers most of the commercial and retail heart of the city. All vehicles entering into the congestion charge zone between the hours of 7 AM and 6:30pm, excluding weekends, are required to pay £5 (approximately \$8) to drive or park within the zone. Motorists can pay the charge through a variety of means, including at certain retail outlets and gas stations, by telephone, through self-service machines, and by mail. Residents within the congestion charge zone and certain others, including the owners of alternative fuel vehicles, are exempt from all or a portion of the charge. The Central London Congestion Charge program is estimated to have reduced congestion in central London by 25 to 30 percent.

Vehicles are tracked within the zone by a network of video cameras. The cameras capture an image of the license plate of every vehicle entering the zone, which is then compared against a database of all vehicles known to have paid the £5 fee. The image of those license plates known to have paid is immediately discarded; the image of those plates registered as unpaid is re-checked manually and then submitted for a fine. The fine increases as it remains unpaid, to a maximum of £120 (approximately \$200) and the impounding of the vehicle. The revenue raised from fines is used for the improvement of the transportation infrastructure of London. The use of personal information captured through the video cameras is governed by the Transport for London privacy policy, which is posted on the Transport for London website.

Trucks are required to pay the congestion charge in the same manner as private automobiles, but with an additional £10 charge for administrative costs. Trucking companies are permitted to register all of their vehicles at once with Transport for London (a minimum of 25 vehicles must be registered to qualify as a commercial fleet). Commercial trucks are permitted to pay the congestion charge monthly, rather than daily, with funds drawn directly from a "fleet account" established by each trucking company. Trucking companies can manage their accounts through a secure website.

The Central London Congestion Charge program was established following a 6-month public outreach effort. With the program now operational, Transport for London makes extensive information available to the public, including to trucking companies, through the Internet.

In addition to the congestion charge, London also maintains the London Lorry Ban to restrict the movement of trucks on residential roads on nights and weekends. The Lorry Ban provides a network of designated streets that trucks must use during the restricted period;

these streets are available to trucks at all times, but required during nights and weekends. A permit is required to travel anywhere but on the designated streets, and compliance is enforced by police officers on the streets and through a network of closed-circuit television cameras.

### Los Angeles, California

Relevant Public Agencies: California DOT

Community Redevelopment Agency Goods Movement Advisory Committee Los Angeles Department of City Planning Los Angeles DOT (LADOT) Southern California Association of

Governments (SCAG)

Themes: Interagency coordination, investment in infrastructure, regional cooperation, innovation and technology

Composing a portion of the greater Los Angeles metropolitan area, the city of Los Angeles has a population of 3.7 million people and extensive truck operations on the local and regional roads that run through the city. Truck activities in Los Angeles include trucks serving the Port of Los Angeles, a major gateway for much of the West Coast. The city of Los Angeles works with the Port of Los Angeles to improve traffic operations in and around the port, and is currently considering allowing the port to operate 24 hours per day. This would allow trucks to service the port at all times, thereby eliminating truck idling during the hours the port is closed.

The SCAG, which includes all of Southern California except San Diego County, and its GMAC have long been the promoters of projects such as the Alameda Consolidated Transportation Corridor and various gateway and truck lanes studies. SCAG staff and GMAC have been instrumental in coordinating not only with the California Trucking Association, but also with major parcel carriers such as UPS and FedEx, as well with both the Class I railroads in the region. SCAG was the first to take leadership in trying to develop a regional truck model.

The LADOT has implemented a series of truck initiatives aimed at facilitating truck movement and reducing truck-generated congestion, but no comprehensive truck management program has been developed. In general, Los Angeles has avoided designating truck routes—although there are certain streets within the city that serve as de facto truck routes—in favor of other, less regulatory strategies: roadway improvements, signalization, and striping solutions designed to improve truck movement and safety. LADOT has also created a Traffic Action Team to respond to traffic emergencies and other special circumstances, including circumstances involving trucks. LADOT is also responsible for building a local GIS transportation database and for pursuing grant funds to support capital improvements for industrial areas in downtown Los Angeles, Hollywood, and Van Nuys.

The Mayor of Los Angeles recently created the Transportation Task Force, which includes a sub-committee dedicated to freight movement in the Los Angeles area. The sub-committee is made up of representatives of the trucking industry, as well as representatives of public transit and other modal organizations. The sub-committee mainly handles issues of offstreet loading and efficient delivery and has generated a list of proposed solutions to common problems. These solutions include lengthening loading zones to accommodate large trucks, improving enforcement of loading-zone use, and developing a pre-paid system for the use of loading zones.

The Community Redevelopment Agency of Los Angeles, an economic development organization dedicated particularly to the reuse of former industrial areas within Los Angeles, works on trucking issues as they relate to easing congestion and improving the flow of goods through the city. The Community Redevelopment Agency has recently prepared a major report on the efficiency of truck movement in the urban industrial areas of Los Angeles, and has requested funding for the implementation of truck management solutions. The Redevelopment Agency is also working to develop more efficient mechanisms for the loading and unloading of goods, including the possibility of a central facility.

#### State of Maryland

Relevant Public Agencies:

MDOT - Freight Policy Office Maryland State Police Maryland Transportation Authority Police

Themes: Public-private partnerships, innovation and technology, investment in infrastructure

As is typical of most states, MDOT is responsible for overseeing height and weight restrictions for trucks and compliance with safety regulations on state-managed roads and bridges. The Maryland State Police and the Maryland Transportation Authority Police carry out the responsibilities of the state through roving crews used to perform roadside inspections on trucks. MDOT staff members also conduct on-site visits at trucking companies to inspect for preventative truck maintenance and other maintenance related issues.

Maryland has had trouble maintaining effective weigh station facilities, particularly in the urbanized Prince George's County. Many of the existing weigh stations are inadequate to meet contemporary needs, with many too small to handle the demands of large trucks. MDOT is currently planning for a new weigh station.

MDOT has implemented the use of transponders to facilitate truck operations on its roads. In particular, the transponder technology currently used by Maryland allows for electronic toll collection and automatic vehicle identification. Maryland is exploring other uses for new technologies, and is currently partnering with Johns Hopkins University to expand the use of transponders and other screening devices.

### **New York City, New York**

Relevant Public Agencies:

New York Metropolitan Transportation Council (NYMTC) New York City DOT New York State DOT

Themes: Public-private partnership, education and outreach, interagency coordination, regional cooperation, technology and innovation

With its unique security concerns, New York City has a particular interest in ensuring that trucks move in an orderly fashion through the city and that their operations are restricted to certain designated areas. New York City works closely with the freight advisory group of the NYMTC, the MPO for the New York City region. NYMTC has been particularly proactive with regard to freight movement in the region with the institution of a Freight Transportation Working Group (FTWG) and the development of a Regional Freight Plan. The region is currently attempting to make a significant mode shift for the movement of freight from trucks to rail for security, environmental and congestion reasons. The FTWG meets bi-monthly and the meetings are open to the public.

With regard to security, there has been interest in integrating security plans currently created in isolation by the various agencies that operate the transit, highway, and bridges of the city. In the months following the events of September 11th, New York City closed many of its major gateways to trucks—including the Holland Tunnel—but has recently reopened several of them.

New York City is in the process of conducting its first comprehensive update to the truck route management system that was established in 1981. This study looks to incorporate the needs and opinions of the trucking industry, city businesses, and local communities into the operations of the truck route system. While the city has an existing system of truck routes, the study seeks to address route management, signage, enforcement, policy, and curbside management concerns.

The interests and needs of the trucking industry have become an increasingly important part of freight planning in the New York City region, as the public sector has worked to provide adequate facilities for truck drivers and trucking companies. In an example of this type of cooperation, New York State DOT recently used Federal transportation funding to install plug-in power sources for the hundreds of trucks that gather to load and unload at the Hunt's Point Cooperative Market. These power sources provide heat and light to the drivers and have dramatically reduced the number of trucks idling for power, thereby reducing the amount of exhaust in the area.

Any overweight or oversized truck hoping to operate within the boundaries of New York City is required to obtain a permit, which adds an additional layer of oversight. New York City is also considering implementing a web-based mapping tool to allow truck drivers to plan out an optimal route based on their weight and destination.

New York City has developed several innovative programs for managing its commercial parking. The drivers of trucks and other commercial vehicles are required to pay a charge to use commercial parking spaces during the hours of 7 AM and 6 PM - \$2 for one hour, \$5 for two hours, and \$9 for three hours - which are clearly marked as limited to no more than three hours per vehicle. Businesses are able to purchase debit cards with memory chips for use by their drivers, who are thereby not required to carry cash for use in the meters. The New York City Police Department has found enforcement to be much easier with this system than with a traditional system of meterless loading zones, and the average time spent in a commercial spot has dropped from an average of 5 hours to approximately 90 minutes. In addition to this, there has been significant revenue generation. Initially, approximately \$300,000 was invested in research, development, and purchasing; the revenue projection for 2005 is \$10 million.

The Port Authority of New York & New Jersey, which is responsible for several bridges in the city, is also in the process of experimenting with congestion pricing on the George Washington Tunnel for all vehicles including trucks. This seems to have led to a shift in travel patterns. The Port Authority's Freight Information Real-Time System for Transport will provide cargo and equipment information in real-time on the Internet. The website will integrate available information on ship, railroad or plane arrivals, provide up-to-date cargo status, and real-time road conditions, and provide real-time video, which monitors congestion at seaport entry gates or airport access points. A pilot project is being developed for the Southern Corridor in New Jersey.

# Portland, Oregon

Relevant Public Agencies: Metro (MPO for Portland)

Port of Portland

Portland Office of Transportation

Themes: Interagency coordination, public-private partnerships, education and outreach, enforcement, investment in infrastructure

A city of 550,000 residents, Portland has developed an extensive program of freight management strategies. Within the city limits, different streets have been designated for use as regional, major, and minor freight routes, with an accompanying map available on the Internet. The routes are delineated by mode, and the map is updated every five years. The intention of this system is to keep trucks off residential roads as much as possible and to provide incentives to the trucking industry to use the designated routes. The Portland Office of Transportation works with individual neighborhoods, through community outreach efforts, on truck management issues.

The context for freight planning in the city of Portland was, in part, established by organizations with involvement in regional planning, including Metro and the Port of Portland. In recent years, Metro has designated key freight corridors—both arterials and collector streets—for access to industrial areas and important intermodal facilities. Metro has also designated industrial infrastructure for future investment and upgrade. The Port of

Portland has played a significant role in advocating for the needs of freight in the area and has urged comprehensive planning for freight facilities.

The city of Portland is currently at work on a master plan for freight management, which will create holistic policies regarding freight movement and the upgrading of freight-oriented infrastructure. The plan will also endeavor to coordinate the needs of freight with the needs of pedestrians, cyclists, and other modes using the city streets. Portland has also worked to develop land use designations that will support its desired freight management plans. Designated freight districts are areas in which freight movement is encouraged and infrastructure is development to facilitate truck operations.

Portland is considering innovative ways to fund freight-oriented projects, including the use of weight and miles fees (implemented by the State of Oregon, with income shared with the city of Portland), truck registration fees, and a fee based on assumptions about the traffic generated by a particular business. In general, Portland has worked closely with the trucking industry on the development freight management policies. From February to June 2003, Portland city staff held committee meetings, with extensive input from business and industry, to help to develop new solutions for freight management and freight infrastructure. These meetings had high-profile support from elected leaders in Portland, contributing to their ultimate success.

Portland also runs the Angled Parking Permit program, which attempts to alleviate street blockage caused by loading/unloading trucks by providing operators with strategies to encourage better traffic flow. Permits are granted to allow an individual truck to park at a particular site. The program suggests various parking strategies to drivers, including anything from setting up cones to utilizing a flagger. The Office of Transportation administers the program.

Portland is very strict about truck activity around construction sites. Every major construction project requires a truck management plan, which must include information about the staging and idling of trucks.

The city of Portland coordinates with the State of Oregon to distribute permits for over-dimension—weight and size—trucks. This harmonization of city- and state-level permitting reduces the burden on trucking companies and therefore encourages cooperation between industry and government. In a further example of cooperation, Portland issues permits to trucks to allow on-street loading and unloading in particular circumstances. This encourages trucking companies to coordinate with the Portland Office of Transportation for their unloading needs and allows the city to keep track of trucking activity.

The Oregon Freight Advisory Committee (OFAC), a statewide freight committee, was constituted in 2000 to focus on the freight needs of the state highway system. OFAC also deals with issues within Portland as appropriate. A regional freight committee also exists, and consists of members from county/city agencies; this committee focuses primarily on data collection. Furthermore, a committee was recently designated at the city level to

develop guidelines for freight movement in the city, and includes members of the business community as well as members from the county/city agencies.

#### San Francisco, California

Relevant Public Agencies: San Francisco Department of Parking & Traffic San Francisco DPW

Themes: Public-private partnerships, enforcement, regulation and incentives

The city of San Francisco, with a population of close to 776,000, experiences truck traffic from local commercial and retail operations. Truck traffic is managed in several different ways in the city of San Francisco. For loads such as delivery trucks (including semi-trailers), there is a network of truck restrictions and designated truck routes to assist with the flow of truck traffic. The designated routes have evolved over time, primarily through citizen and neighborhood activism.

In addition, San Francisco has an Oversize Vehicle Permit program. An oversize vehicle is specifically defined in the California Vehicle Code. Any vehicle or load that meets the definition of an oversize vehicle is required to obtain a permit from the Department of Parking & Traffic. There are several types of permits issued, including an annual permit and a single trip permit. The city works closely with the State of California, permitting agencies, trucking companies, and the traffic division of the San Francisco Police Department to ensure the safe passage of oversize vehicles throughout San Francisco.

In 2001, the city of San Francisco proposed to ban all trucks of greater than 25 feet in length from traveling in a portion of the downtown area between the hours of 7 AM and 7 PM on weekdays. The ban was never implemented, due to protests from a wide variety of downtown business, trucking firms, and labor unions, but it initiated a discussion between the city and the business community about downtown parking and trucking issues. Truck parking in downtown San Francisco is a particularly thorny issue, as most loading and unloading is done directly from the street, rather than from an off-street loading zone. Many of the on-street loading zones are frequently occupied by non-commercial vehicles or by vehicles with commercial license plates that are not making deliveries. These vehicles include vans, pick-up trucks, station wagons, and sport utility vehicles. San Francisco has a long-standing policy to discourage the provision of off-street parking in downtown buildings. While this policy has been successful in increasing the percentage of downtown workers who commute by public transit, it increases the competition for use of on-street spaces.

The San Francisco Department of Parking & Traffic has worked to prevent abuse of designated loading zones—San Francisco maintains separate loading zones for general commercial use and for trucks. In an effort to prevent non-delivery vehicles from using truck zones, San Francisco has recently created a third category of loading zones that can be used only by trucks with six or more wheels. All loading zones have a 30-minute time limit. The curbs are painted yellow and signs are posted at each space informing parkers of the

time limit and the days and times of the restriction. In an effort to gain compliance with the 30-minute time limit, the Department has also installed parking meters in some loading zones—costing 75 cents for 30 minutes—to encourage turnover, but has found that compliance is weak.

In California, trucks are allowed to double-park for loading and unloading if there is space available at the curb and they are actively loading or unloading goods. The fact that this type of double-parking is legal is not widely known, however, leading to public complaint about the practice.

Construction projects are required to receive a series of permits from the San Francisco DPW, which allow construction-related trucks to park in front of a building or construction site. The requests for such permits are evaluated on a case-by-case basis, the details of the permit can be rigorous, and compliance with the parameters of the permit is strictly enforced. For new construction, San Francisco strives to require the inclusion of sufficient off-street loading areas.

### **Seattle, Washington**

Relevant Public Agencies:

Puget Sound Regional Council
Seattle DOT

Washington DOT (WSDOT)

Themes: Public-private partnerships, education and outreach, regional cooperation

As an important port city, Seattle is at the center of significant regional intermodal freight activity. The Puget Sound Regional Council, the MPO for the 6,000 square-mile Seattle-Tacoma area, focuses on regional freight movement of all types. The Regional Council has established the Freight Roundtable, which includes representatives of Federal, state, and local government, of the three deepwater ports of the region, and of the private sector, including all of the freight modes that operate in the region (marine, rail, truck, and air cargo). The Roundtable, co-sponsored with private interests through the Economic Development Council of Seattle & King County, provides a forum for the discussion of freight issues and the prioritization of freight projects. During the period from 1996 to 2003, the Roundtable has emphasized port access and railroad-related projects.

Together with the WSDOT, the Regional Council co-sponsors an interagency group of local governments, which individually sponsor the shared package of freight investments titled the FAST Corridor (Freight Action Strategy Corridor). Phase I (1997-2003) consisted of 15 projects valued at \$500 million, half of which are now complete. Contributions were made by all levels of government, and by the two affected Class I railroads in the region.

The Regional Council is not directly involved with local-level freight planning. Seattle is a member of the FAST Corridor agency staff team. A truck restriction is currently in place in downtown Seattle, requiring large trucks to travel through downtown only at off-peak hours. The Port of Seattle (which is independent of the city of Seattle) makes a map of truck

routes and truck restrictions available to all drivers traveling to and from the port, and the city of Seattle maintains an outreach program—to publicize traffic regulation information—for local companies that receive and generate shipments by truck. Information about traffic congestion and construction activity is made available online to truck drivers.

The city of Seattle has established two bodies to assist in the management of truck issues: the Office of Freight Facilitator and the Freight Mobility Advisory Committee (FMAC). The Office of Freight Facilitator is responsible for developing a freight management plan for Seattle, for identifying high-priority projects, for communicating with the public on freight issues, and for championing the needs of freight movement. This office also participates in the design and review of projects that may impact freight movement in Seattle. The office also interacts with other public agencies to champion the interests of freight movement.

The FMAC, which includes public and private interests, meets monthly to discuss freight-oriented projects underway by the Seattle DOT. The FMAC has, for instance, initiated a program—funded with both private and public monies—to alleviate congestion at identified choke-points near the Port of Seattle.

The municipal government maintains a distribution list of freight companies that operate in the industrial areas of Seattle to update them on traffic policies and projects that impact freight movement.

#### Vancouver, British Columbia

Relevant Public Agencies: TransLink - Greater Vancouver Transportation

Authority

City of Vancouver

Vancouver Police Department City of Vancouver Port Corporation

Vancouver Port Corporation

Themes: Public-private partnerships, regional cooperation, enforcement, regulation and incentives, investment in infrastructure

The efficient movement of freight is treated as priority by the city of Vancouver, which includes comprehensive regulations on freight movement in its municipal bylaws. The bylaws refer specifically to truck dimension, load, number of axles, weight, vertical clearances, and type of vehicles and tires. Restrictions on the parking of trucks and trailers, securing of loads and use of engine brakes within city limits are also outlined by the bylaws.

Vancouver maintains a network of truck routes, which trucks of 3 or more axles and weight of 5,500 kilograms or more are required to use. The Vancouver Police Department enforces this requirement. Vancouver works to maintain the integrity of its truck routes, including them in regional transportation plans, working to target transportation investment to roads used by trucks, and attempting to avoid any road closures that would compromise the

overall network. Truck routes are a regional priority and are regulated by a regional transportation body, TransLink.

Commercial vehicles are permitted to use all municipal parking meters for free until 10 AM, and many commercial areas of the city include lanes dedicated to use by trucks and other freight vehicles. No vehicle is allowed to park for more than three consecutive hours on municipal streets—in both commercial and non-commercial areas—a regulation that is enforced in response to particular complaints. Double-parking is prohibited and is aggressively enforced by bylaw staff. Permits are available to allow for the extended use of a traffic lane, such as during construction.

Vancouver currently bans the idling of passenger buses for more than three minutes, and is looking to extend that regulation to cover all vehicles, particularly diesel-burning trucks. The city also has a comprehensive Motor Vehicle Noise Abatement bylaw, which bans the use of "engine brakes" or "jake brakes," which are particularly noisy, at any time except during emergencies.

In addition to its role of planning the truck route system, TransLink has authority to regulate trucks carrying hazardous materials. Vancouver used to prohibit gasoline trucks over a certain size from entering the dense residential and downtown areas, but this regulation was revoked because it conflicted with provincial law. However, there is now a movement to reimplement this legislation due to, among other things, safety concerns.

The management of overweight trucks is the most significant freight-oriented concern in Vancouver, and the municipal government is working collaboratively with the trucking industry and with law enforcement to find solutions to the problem. To ensure higher compliance with the Motor Vehicle/Commercial Transport Regulations and the municipal bylaws, city officials have focused on freight-oriented companies (both trucking companies and the companies hiring trucking companies), as vehicle operators are sometimes pressured to disobey bylaws and other regulations. Vancouver is also developing a system by which new construction permits, contracts, and agreements require all trucks to adhere to local regulations and bylaws. The trucking industry has also been closely involved with the development of the freight-oriented portions of the regional transportation plan prepared by TransLink.

# 3.4 SUCCESSFUL PRACTICES IN TRUCK MANAGEMENT

Table 8. Successful Practices in Truck Management, by Area

City/State	Concept	Successful Practice
Baltimore	Designated routes	Separates local truck traffic from through
		truck traffic with a series of truck
		designations and local truck zones.
Baltimore	Infrastructure	Works with developers to ensure that all new
	planning	buildings in the city have adequate off-road
		truck facilities to meet future needs.
Cambridge	Regional planning	Participated in a regional study of freight
		movement in eastern Massachusetts and used
		the data produced by the study to develop a
		local truck management plan.
Cambridge	Communication	Provides extensive information to the trucking
		industry on local truck routes, including
		brochures, maps, and online information.
Cambridge	Parking management	Facilitates the efficient use of on-street
		parking through the conversion of loading
		zones to public parking spaces during the
G 1 11	T.C. A.	afternoon and evening hours.
Cambridge	Infrastructure	Works with the Massachusetts Highway
	improvements	Department to encourage the prioritization of
		improvements to roadways designated for use by trucks.
Chicago	Freight-oriented	Targets freight-oriented investment through
	industrial council	the creation of designated industrial corridors,
		each overseen by a public-private advisory
		group empowered to make recommendations
		for truck-oriented infrastructure.
Chicago	Collaboration	Works cooperatively with the owners and
		operators of industrial facilities to develop
		schedules for loading and unloading that
		minimize truck idling and double-parking.
Chicago	Regional planning	Participates in an MPO-run freight task force
		to plan for the long-term freight needs of the
		area, with emphasis on intermodal
		coordination.

City/State	Concept	Successful Practice
London	Pricing strategies	Permits trucking companies to register all
		vehicles at once. Also permits trucks to pay
		central London congestion charge monthly
		rather than daily with funds drawn directly
		from a "fleet account" established by each
		trucking company.
Los Angeles	Prioritization of	Created a Traffic Action Team to respond to
	freight	traffic emergencies and other special
		circumstances, including circumstances
		involving trucks.
Maryland	Technology	Exploring new uses for transponders and
		other screening devices in partnership with
		Johns Hopkins University
New York	Pricing strategies	Requires commercial vehicle drivers to pay a
City	8	charge to use commercial parking spaces.
		Sells debit cards with memory chips for use
		by drivers
Portland	Designated routes	Designated different streets for use as
		regional, major, and minor freight routes, with
		an accompanying map available on the
		Internet.
Portland	Planning	Working on a master plan for freight
	8	management to create holistic policies
		regarding freight movement, freight-oriented
		land use, bicycle and pedestrian interactions
		with trucks, and upgrading of freight-oriented
		infrastructure.
Portland	Coordination	Coordinates with the State of Oregon to
		distribute permits for overweight trucks,
		reducing the burden on trucking companies
		and encouraging cooperation between
		industry and government.
San Francisco	Parking management	Installed parking meters in some loading
		zones—costing 75 cents for 30 minutes—in
		order to encourage turnover of spaces.
San Francisco	Parking management	Maintains separate loading zones for general
		commercial use and for trucks with six or
		more wheels.
Seattle	Institutional capacity	Created office for developing a freight
	building	management plan, identifying high-priority
	- G	projects, communicating with the public on
		freight issues, and championing the needs of
		freight movement. Office also participates in
		the design and review of projects that may
		1 2
		impact freight movement in Seattle.

City/State	Concept	Successful Practice
Vancouver	Parking management	Permits commercial vehicles to use all municipal parking meters for free until 10
		AM. Created dedicated commercial vehicle lanes in many commercial areas of the city.
Vancouver	Designated routes	Works to maintain the integrity of its truck routes by including them in regional transportation plans, working to target transportation investment to roads used by trucks, and attempting to avoid any road closures that would compromise the overall network.
Vancouver	Noise control	Enacted municipal bylaw that bans the use of "jake brakes."